## REMARKS

Claims **3, 5-8, 11-21, 24, 26, 28** and **29** are pending.

Claims **3, 11** and **17-21** are withdrawn.

Claims **5-8, 12-16, 24, 26, 28** and **29** have been rejected.

Claim **30** is new. No new matter has been added. Support for this claim can be found, at least, within paragraph [0027] of the specification.

Claims **12, 24, 26, 28** and **29** have been amended. Support for the amendments can be found in at least paragraphs [0013]-[0021] and [0036] of the specification.

## *Rejection of Claims under 35 U.S.C. § 101*

Claims 5-8, 24, 28, and 29 rejected under 35 U.S.C. 101 because the claims are purportedly not tied to a particular machine. Independent method claims 24 and 28 have been amended to tie the steps to an integration server. Applicants respectfully submit that this objection is overcome thereby.

## *Rejection of Claims under 35 U.S.C. § 103*

Claims 24, 26, and 29

Claims 24, 26, 28, and 29 stand rejected under 35 U.S.C. § 103(a) as purportedly being unpatentable over U.S. Patent No. 6,828,963 ("Rappoport") in view of U.S. Patent Publication No. 2005/0160361 A1 ("Young"). Applicants respectfully traverse this rejection.

Applicants respectfully submit that neither Rappoport nor Young, alone or in any combination, teach or suggest, at the very least, that a product common model determines a common set of fields of product management information – where information to be read into and out of this common set of fields is converted between a source and target system. Further, the source and target systems each contain fields of product management information that are not among the common set of fields. This partial commonality and partial exclusivity is due, in part, to the fact that each of the source and target systems is focused on information regarding different aspects of product management. For example, a source system may be a product manufacturing system and a target system may be a product service and support system. Because each such system has a different focus, each system keeps track of information regarding different aspects of product management. Thus, the definition of the product common model can

serve as a filter by defining a common set of fields that will be useful in synchronizing source and target systems. These limitations are recited in claim 24 (similar limitations are recited in claim 26).

Rappoport is cited as purportedly teaching the claimed "synchronizing", "extracting", and "converting." *See* Office Action, pp. 4 and 5. Notwithstanding other deficiencies of the Office Action's position, Applicants respectfully submit that Rappoport computer aided design (CAD) method fails to teach or in any way suggest features comparable to the amended limitations, as well as other limitations, recited in the claims.

As an initial matter, the system in Rappoport is concerned with migrating a CAD design from a first CAD system to a second CAD system. *See* Rappoport Abstract. As noted by Rappoport, many aspects of a CAD system are proprietary, and the result is that the methods by which CAD designs are stored on a CAD system are secret. *See* Rappoport 2:40-49. Thus, Rappoport admits that in translating a CAD design from one CAD system to another CAD system, some translation failures will occur. *See* Rappoport 5:24-28. Such shortcomings illustrate the fact that Rappoport is *not* intended or able to provide the ability to <u>synchronize</u> two CAD systems (even if such an operation were possible, a concept on which Applicants need not and do not comment). In attempting to convert CAD data, Rappoport is simply trying to achieve the best translation of a CAD design from one CAD system to another, given the circumstances. Thus, an ordinary artisan would be unable to modify Rappoport's one-time, unidirectional transfer of CAD designs into anything comparable to the claimed synchronization of product management information via a product common model, and further, doing so by determining a common set of fields of a source and target system, which can serve as a filter of the product management information managed by each source and target system.

Rappoport's failure to teach the claimed synchronization stems, in part, from Rappoport's failure to accomplish any aim even remotely comparable to the claimed synchronization between a plurality of source systems and a target system. Rappoport's system may or may not succeed in migrating a CAD design from one system to another CAD system. This uncertainty highlights the fact that Rappoport has no conception of determining a common set of fields between a source and target system. Notwithstanding the plethora of other distinctions extant in Rappoport, had Rappoport appreciated such issues, Rappoport's system would not contend with translation

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failures, at least because the *a prior* knowledge of fields allows the use of a common set of fields – avoiding just the type of failure suffered in Rappoport's approach.

Further, the very nature of the data manipulated by Rappoport would prevent an ordinary artisan from event attempting to use Rappoport's teachings in some misguided attempt to create a system comparable to that of the claimed invention. Such attempts would fail, in part, because CAD design data is not amenable to an operation in any way comparable to the claimed synchronization. For example, attempting to combine two CAD designs of an automobile, in an effort to produce a combined design for a single automobile, is not only not taught by Rappoport, but is nonsensical, by definition. By contrast, product management information handled by a source system may support a certain set of source data fields, while information handled by a target system may support a different set of target data fields. However, the claimed product common model takes advantage of the fact that a common set of fields can be identified, as between the information handled by the source and target systems. The nature of the information in these common fields is typically amenable not only to synchronization (e.g., do the two systems have the same address for the customer, and if not, which is more recent), but also to integration (e.g., after converting first source information from a first source system and second source information from a second source system, the first product management information in a product common model indicates that 12 widgets are in stock at the first location and the second product management information in the product common model indicates that 17 widgets are in stock at the second location, so combining the two results in information in the product common model that indicates that 29 widgets are in stock for all locations combined). Thus, by defining the claimed product common model, the claimed invention is able to provide the claimed synchronization and integration of information.

As noted above, a further advantage enjoyed as a result of the characteristics of product management information is the ability to integrate product management information from multiple source systems, prior to the claimed integration server updating the target system with the resulting product management information. This advantage is facilitated by the use of the claimed product common model, as also noted above. A further discussion of the integrative aspect of the claimed invention is provided in connection with arguments in favor of allowability subsequently made with regard to claims 28 and 30.

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Yet another advantage provided by the claimed invention is the ability to support the filtering of the product management information being synchronized. In contrast to the claimed invention, Rappoport migrates CAD designs from one CAD system to another CAD system, one CAD design at a time, and attempts to do so for the *entire* CAD design. This approach presents itself as being intuitively correct – CAD designs are unitary wholes, and when migrating from one CAD system to another, the desire to have a complete CAD design migrated from one system to the other is completely understandable and reasonable to expect. That being the case, it comes as no surprise that Rappoport fails to even consider an intentionally migrating only a partial representation of a CAD design's information, particularly when one considers that the migration of CAD designs is typically performed as part of moving a CAD design venture from an old CAD system to a new CAD system (and thus, the unidirectional nature of the migration itself). In other words, because both the original and new CAD systems in Rappoport have the same purpose – CAD design – it would defy common sense for Rappoport to migrate only a portion of a CAD design from one to the other. By contrast, the claimed method specifically recognizes and provides for partial conversion. The claimed source system could, for example, concern the manufacturing aspects of product management. Not all aspects of the source system's product management information may be relevant to a target system, which might provide product support services. Thus, an advantage of defining the product common model such that only certain of the fields of information from a source and target system are determined, is that the integration server becomes much more efficient because not all of the product management information on each system need be converted.

Applicants further respectfully submit that Young is only cited for limitations that have been stricken from the current claims. Thus, without addressing any purported teachings of Young, Applicants respectfully submit that Young is no longer relevant to the remaining limitations presently recited in the claims.

For at least the foregoing reasons, Applicants submit that neither Rappoport nor Young, alone or in combination, provide disclosure of all the limitations of independent claims 24, 26, and 28, and all claims depending therefrom, and that these claims are in condition for allowance. Applicants therefore respectfully request the Examiner's reconsideration and withdrawal of the rejections to these claims.

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## Claims 5-8 and 12-16

Claims 5-8 and 12-16 stand rejected under 35 U.S.C. § 103(a) as purportedly being unpatentable over Rappoport in view of Young as applied above, and further in view of U.S. Publication No. 2005/0197880 A1 ("Walsh").

Claims 5-8 depend on independent claim 24 and claims 12-16 depend on independent claim 26. Applicants respectfully submit that these claims are in condition for allowance for at least the foregoing reasons set forth with respect to the claim 1. Applicants therefore respectfully request the Examiner's reconsideration and withdrawal of the rejections to these claims.


## Claims 28 and 30

Applicants respectfully submit that the limitations of claims 28 and 30 are also not taught by any combination of Rappoport and Young. Particularly, neither Rappoport nor Young teach or suggest, at the very least, (1) integrating product management information from a plurality of source systems to synchronize a target system, (2) a synchronization that depends on an update corresponding to product management information at a plurality of source systems, and (3) such integrating that further uses at least one record from one of the plurality of source systems and another record from another of the plurality of source systems.

As noted earlier, Rappoport migrates a CAD design from one CAD system to another CAD system. Applicants respectfully submit that Rappoport is completely silent regarding any features comparable to the limitations in claims 28 and 30. Also noted earlier, Young is only cited for limitations that have been stricken from the current claims.

Applicants respectfully submit that Rappoport does not contemplate any features comparable to the claimed product common model because Rappoport fails to contemplate synchronization of any information between any two (or more) systems. Rappoport's method relies on simply applying a sequence of translations to a CAD design on a first system to produce a CAD design destined for a second system. Thus there is no reason for using anything comparable to the claimed product common model. *See* Rappoport 4:63-5:15. In other words, in order to get from CAD system A to CAD system B, Rappoport simply applies the conversions that convert data from A to B. In such a system, it would be of no utility to introduce a common model as an intermediate format, for a number of reasons. For example, because Rappoport's system is concerned only with migrating an <u>entire</u> CAD design from <u>one</u> CAD system to <u>one</u>

other CAD system, there is only one mapping for any piece of the CAD data, and that mapping is either possible, or it isn't. But for each such conversion (e.g., from A to Z, from B to Z, and so on), there must be a separate set of mappings, and for each new system to be supported, there must be a separate set of mappings from the new system to each and every existing system. The exponential explosion in complexity this represents, and the skyrocketing resource requirements that attend such growth, clearly illustrate the crippling effects of scale encountered by such systems.

By contrast, the claimed common model supports the synchronization of a plurality of source systems with a plurality of target systems, while only requiring the integration server to be able to convert information of each system to and from the common model. Rappoport's system does not support such a multi-system synchronization, and further, such multi-system synchronization would be unworkable using that approach. In fact, notwithstanding the fact of its impossibility, attempting to apply the claimed synchronization via a product common model would result in Rappoport's system performing a merger of CAD design data from multiple CAD designs – such a merger would not only defy automation, but would not make sense. The claimed integration is possible because the underlying information being synchronized in the claimed method is product management information, as noted earlier. Thus, not only would an ordinary artisan be faced with an unachievable goal in attempting to modify Rappoport to use the claimed integration and synchronization, the ordinary artisan would find no benefit in accomplishing such a task, were it even possible.

For at least these reasons, Applicants submit that neither Rappoport nor Young, alone or in combination, provide disclosure of all the limitations of claims 28 and 29, and that these claims are in condition for allowance. Applicants therefore respectfully request the Examiner's reconsideration and withdrawal of the rejections to these claims.

## CONCLUSION

Applicants submit that all claims are now in condition for allowance, and an early notice to that effect is earnestly solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the Examiner is requested to telephone the undersigned.

If any extensions of time under 37 C.F.R. § 1.136(a) are required in order for this submission to be considered timely, Applicants hereby petition for such extensions. Applicants also hereby authorize that any fees due for such extensions or any other fee associated with this submission, as specified in 37 C.F.R. § 1.16 or § 1.17, be charged to deposit account 502306.

I hereby certify that this correspondence is being submitted to the U.S. Patent and Trademark Office in accordance with 37 C.F.R. § 1.8 on ____April 21, 2010_____ by being (a) transmitted via the USPTO's electronic filing system; or (b) transmitted by facsimile to _____; or (c) deposited with the U.S. Postal Service as First Class Mail in an envelope with sufficient postage addressed to: Mail Stop _____, Commissioner for Patents, P. O. Box 1450, Alexandria, Virginia, 22313-1450.

/ Samuel G. Campbell, III /          April 21, 2010

Samuel G. Campbell, III          Date

Respectfully submitted,

/ Samuel G. Campbell III /

Samuel G. Campbell, III
Attorney for Applicant(s)
Reg. No. 42,381
512-439-5084
512-439-5099 (fax)